

FINANCIAL CRISIS AND ECONOMIC RECESSION

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It is for me a great honour to have been invited by the Romanian-American University to deliver this lecture. First of all, I would like to thank the university and especially to rector professor Ovidiu Folcut for inviting me, also to professor Bogdan Glavan for his help. For me is a great honour to be here today to inaugurate the Murray Rothbard center. And I want to thank all of you for the "prize for excellence in business cycle research" you have awarded to me. I will never forget it.

Today i will concentrate on the recent financial crisis and the current worldwide economic

Recession which i consider to be the most challenging problem we as economists must now cope with.

The fatal error of peel's bank act

The first important idea I would like to stress is the following: all the financial and economic problems we are suffering today are the result, in one way or another, of something that happened on July 19, 1844... What happened in that fateful date that has conditioned up to the present time the financial and economic evolution of the whole world? In that date peel's bank act was enacted in Great Britain after years of debate between the banking and the currency school theorists on the true causes of the artificial economic booms and the subsequent financial crises that were affecting England especially since the beginning of the industrial revolution.

The bank charter act of 1844 successfully incorporated the sound monetary theoretical insights of the currency school. This school was able to correctly diagnose that the origin of the boom and bust cycles was in the artificial credit expansions orchestrated by private banks financed not by the prior or genuine savings of the citizens, but through the issue of huge doses of fiduciary media (in those days mainly paper banknotes, or certificates of demand deposits issued by banks in a much greater amount than the gold originally deposited in their vaults). So, the requirement by peel's bank act of a 100 per cent reserve on the banknotes issued was, not only in full accordance with the most elementary general principles of roman law regarding the need to prevent the forgery or the over issue of certificates of deposits, but also was a first and good step in the right direction to avoid forever new cycles of booms and depressions.

However peel's bank act, notwithstanding its good intentions, and sound theoretical

Foundations was also a huge failure. Why? Because it forgot to extend the 100 per cent reserve requirement also to demand deposits (Mises 1980, 446-448). Unfortunately in peel's days it was entirely forgotten an old idea originally developed by the scholastics of the Spanish golden century who discovered at least three hundred years earlier that demand deposits (which they called in latin "chirographis

pecuniarium", or money created only by the entries in the accounting books of the banks) were part of the monetary supply (huerta de soto 2009, 606) and also that from the legal point of view not keeping a 100 per cent reserve on demand deposits is a mortal sin and a crime not of forgery, as is the case with the over issue of banknotes, but of misappropriation.

This error of peel's bank act, or better, of most of the economists of those days who did not

Know something already discovered much earlier by the spanish scholastics, proved to be a fatal error: bankers since 1844 did continue keeping fractional reserves, not on bank notes of course because it was forbidden by the bank charter act, but on demand deposits. In other words, banks redirected their activity from the business of over issuing banknotes, to the from the economic point of view exactly equal business of issuing demand deposits without a 100 per cent reserve requirement. So, artificial credit expansions and economic booms did continue, financial crisis and economic recessions were not avoided, and despite all the hopes and good intentions originally put on peel's bank act, soon this piece of legislation entirely lost its credibility and popular support. Not only that, the failure of the bank act, did condition the evolution of financial matters up to the present time and fully explains the problem of wrong institutional design that affects the financial and monetary system of the so called free market economies with the dreadful economic consequences we are currently suffering.

The logic of the historical evolution up today is now easy to understand: bubbles did continue, financial crisis and economic recessions were not avoided, the bail out of banks was regularly demanded, the lender of last resort or central bank was created precisely to bail out the banks, and in order to allow the creation of the needed liquidity in the moments of crisis, gold was abandoned and legal tender laws and a purely fiduciary system were introduced all over the world. As we see the result of this historical process explains the wrong institutional design and financial mess that incredibly is still affecting the world at the beginning of the second decade of the 21st century!

The healthy process of capital accumulation based on true savings

NOW it is important that we quickly review the specifics of the economic processes through which artificial credit expansions created by a fractional reserve banking system directed by a central bank does entirely distort the real productive structure, generating bubbles, inducing wrong investments and finally triggering a financial crisis and a deep economic recession. But before that we must remember the most important rudiments of capital theory that up to the

Present time and at least since the keynesian revolution, have been almost entirely absent from the syllabus of most university courses on economic theory. In other words, we are going to explain first, the specific entrepreneurial, spontaneous and microeconomic processes that in an unhampered free market tend to correctly invest all funds previously saved by economic agents. This is important because only this knowledge will allow us to understand the huge differences of what happens if investment is financed, not by true savings, but by the mere creation out of this air of

new demand deposits which only materialize in the entries of the banks accounting books. What we are going to explain now is, nothing more nothing less, why the so called "paradox of saving" is entirely wrong from the point of view of economic theory (hayek 1975, 199-263), something sadly very few students of economic theory do know even when they finish their studies and leave the university. And however this knowledge refers without any doubt, to one of the most important spontaneous market processes that every economist should be very familiar with.

In order to understand what will follow it is important to visualize the real productive structure of the market as a temporal process composed of many and very complex temporal stages and in which most labor, capital goods and productive resources are not dedicated to produce consumer goods maturing this year, but consumer goods and services that will mature, and eventually will be demanded by consumers, two, three, four, or even much more years from now ... Since the engineers, for instance, do begin to imagine and design a new car, the iron ore is mined, converted into steel, the different parts of the car are produced, everything is assembled in the car factoring, and new cars are distributed, marketed and sold, a period of several years do elapse through a very complex set of successive temporal productive stages. So, what happens if all of a sudden the subjective time preference of economic agents decrease and as a consequence the current consumption of this year decrease, for instance, by ten per cent? If this happens three key spontaneous microeconomic processes are triggered that tend to guaranty the correct investment of the newly saved consumer goods.

The first effect is the new disparity in profits between the different productive stages: immediate sales of current consumer good industries will fall and their profits will decrease and stagnate comparing with the profits of other sectors temporarily more far away from current consumption. I am referring to industries producing consumer goods maturing after two, three, five or more years from now, their profitability not being affected by the negative evolution of short term current consumption. Entrepreneurial profits are the key signal that move entrepreneurs in their investment decisions, and the relatively better profit behavior of capital goods industries helping to produce consumer goods that will mature in the long term, tells entrepreneurs all around the productive structure that they must redirect their efforts and investments from the LESS PROFITABLE INDUSTRIES CLOSER TO CONSUMPTION TO THE MORE PROFITABLE CAPITAL GOODS INDUSTRIES SITUATED TEMPORARILY MORE FAR AWAY FROM CONSUMPTION.

The *second effect* of the new increase in savings is the decrease in the interest rate and how it affects the market price of capital goods situated temporarily more far away from consumption: as the interest rate is used to discount the present value of the expected future returns of each capital good, a decrease in the interest rate increases the market price of capital goods, being this increase in price higher the more distant in the future will the capital good mature into consumption goods. This significant increase in the market price of capital goods compared with the relatively lower prices of the less demanded consumption goods (due to the increase in savings) is a second very powerful microeconomic effect that signals all around the market that entrepreneurs must redirect their efforts investing less in consumption goods industries and more in more distant capital goods industries.

Finally, *and thirdly* we should mention what hayek called *the ricardo effect* (i-iayek 1948,220- 254; 1978, 165-178) which refers to the effect on real wages of any increase in savings: whenever savings increase, sales and market prices of immediate consumption goods relatively stagnate or even decrease. With the same factor incomes this means higher real salaries, and the corresponding reaction of entrepreneurs trying in the margin to substitute the now relatively cheaper capital goods for labor. What the ricardo effect explains is that it is perfectly possible to earn profits even in sales (of consumer goods) go down, if costs decrease even more substituting the now more expensive labor by machines and computers for instance. Who produces these machines, computers, and capital goods that are newly demanded? Precisely the workers dismissed by the stagnating consumer goods industries and who are relocated in the more distant capital goods industries where there is new demand for them in order to produce the newly demanded capital goods. This third ricardo effect with the other two just mentioned do promote altogether a temporarily longer productive process with more stages, that are more far away from current consumption. And this new more capital intensive productive structure is fully sustainable, as is fully backed by prior genuine real savings. And it is also capable to significantly increase in the future the final production of consumer goods and real income of all economic agents. These three combined effects all go in the same direction and are the more elementary teachings of capital theory and explain the secular tendency of the unhampered free market to correctly invest new savings, constantly promoting capital accumulation and the corresponding sustainable increase in economic welfare and development.

The unsustainable nature of the bubbles induced by artificial credit expansions created by the fractional reserve banking industry.

We are now in a position to fully understand, by contrast with the just explained process of healthy capital accumulation, what happens if investments are financed not by prior genuine savings but by a process of artificial credit expansion, orchestrated by fractional reserve banks and directed by the lender of last resort or central bank.

Unilateral credit expansion means that new loans are provided by banks and recorded in the asset side of their balance sheets, against new demand deposits that are created out of this air as collaterals of the new loans, and that are automatically recorded in the liability side of banks balance sheets. So new money, or i would better say new "virtual money" because it only "materializes" in bank accounting book entries, is constantly created through this process of artificial credit expansion. And in fact roughly only around ten per cent of the monetary supply of most important economies is materialized in cash (paper bills and coins) being the remaining 90 per cent of the monetary supply this kind of virtual money that only exists as written entries in the bank books of accounting (precisely this is what the spanish scholastics already called more than 400 years ago "chirographis pecuniarum" or virtual money that only exists written in a book of accounting).

It is easy to understand why credit expansions are so tempting and popular and the way in which they entirely corrupt the behavior of the economic agents, deeply demoralizing society at

All levels. First of all, entrepreneurs are usually very happy with credit expansions as it seems as if any investment project no matter how crazy it would appear in other

situations, easily can get financing at very low interest rates. The money created through credit expansions is used by entrepreneurs to demand factors of production to be employed mainly in more distant from consumption capital goods industries. As the process has not been triggered by an increase in savings, no productive resources are liberated from consumption industries, and the prices of commodities, factors of production, capital goods and the titles that represent them in stock markets substantially tend to grow creating a market bubble. Everybody is happy specially because it appears as if it would be possible to increase very easily one's wealth without any sacrifice in the form of prior savings, and honest hard individual work. The so called "virtuous circle of the new economy" in which recessions seemed to have been avoided forever, cheats all economic agents: investors are very happy looking at stock market quotations that grow day after day; consumer goods industries are able to sell everything they carry to the market at ever increasing prices; restaurants are always full with long waiting lists just to get a table; workers and their unions see how desperately entrepreneurs demand their services in an environment of full employment, increase in wages and immigration; political leaders benefit from what appears to be an exceptionally good economic and social climate that they always sell to the electorate as the direct result of their leadership and good economic policies; state budget bureaucrats find astonished how every year public income do increase at double digit figures, specially the proceeds coming from value added tax that, although at the end is paid by the final consumer, it is advanced by the entrepreneurs of the early stages newly created and artificially financed through credit expansion.

But we can now ask ourselves: for how long can this party last? For how long can continue the huge discoordination between the behavior of consumers (that do not want to increase their savings) and that of investors (that continually increase their investments financed by the artificial creation of virtual money by banks and not by prior genuine savings of the citizens)? For how long can last the illusion that everybody can get whatever he wants without any sacrifice?

The unhampered market is a process very dynamically efficient (huerta de soto 2010a, 1-30).

Sooner or later, but in any case inevitably it always discovers (and tries to correct) the huge errors

Committed. Six spontaneous microeconomic reactions always develop, putting an end and reverting the negative effects of the bubble years financed by artificial bank credit expansion.

The spontaneous reaction of the market against the effects of credit expansions: first the financial crisis and second the deep economic recession.

I study with detail the six spontaneous and inevitable microeconomic causes of the reversal of the artificial boom that the aggression of bank credit expansion invariably triggers in the market in my book on *money, bank credit and economic cycles* (huerta de soto 2009, 361-384). This book has been translated into romanian thanks to the efforts of tudor smirna and the late diana costea, and it has been published by the alexandru ioan cuza university with the title *moneda, creditul bancar si ciclurile economice*. Let us summarize the six effects that cause the reversal of the artificial boom:

1st the rise in the price of the original means of production (mainly labor, natural resources, and commodities). Tl-iese effect results when these resources have not been liberated from consumer goods industries (because savings have not increased) and the entrepreneurs of the different stages in the production process compete with each other demanding the original means of production with the newly created loans they have received from the banking system.

2nd the subsequent rise in the price of consumer goods even at a quicker pace than the rise of the price of the factors of production. These happens when time preference remains stable and the new money created by bank reaches the pockets of the consumers in an environment in which entrepreneurs frantically try to produce more for distant consumption and less for immediate consumption of all kinds of goods. This also explains the 3rd effect which is

3rd the substantial relative increase in the accounting profits of companies closest to final consumption, specially comparing with the profits of capital goods industries which begin to stagnate when their costs rise more rapid than their turn over.

4th "the ricardo effect" which exerts an impact which is exactly opposite to the one it exerted when there was an increase in voluntary saving. Now the relative rise in the prices of consumer goods (or of consumer industries turn over in an environment of increased productivity) with respect to the increase in original-factor income begins to drive down real wages, motivating entrepreneurs to substitute cheaper labor for machinery, which lessens the demand for capital goods and further reduces the profits of companies operating in the stages furthest from consumption.

5th the increase in the loan rate of interest even exceeding pre-credit expansion levels. Tl-iis happens when the pace of credit expansion stops accelerating, something that sooner or later always happens. The interest rates significantly increase due to the higher purchasing power and risk premiums demanded by the lenders. Furthermore, entrepreneurs involved in malinvestments start a "fight to the death" to obtain additional financing to try to complete their investment projects (hayek 1937).

These five factors provoke the following sixth combined effect:

6th companies which operate in the stages relatively more distant from consumption begin to discover they are incurring in heavy accounting losses. These accounting losses when compared with the relative profits generated in the stages closest to consumption, finally reveal beyond all doubt that serious entrepreneurial errors have been committed and the urgent need to correct them by paralyzing and liquidating the investment projects mistakenly launched during the boom years.

The financial crisis begins the moment the market, which as i have said is very dynamically efficient (huerta de soto 201 oa, 1-30) discovers that the true market value of the loans granted by banks during the boom is only a fraction of what was originally thought. In other words, the market discovers that the value of the bank assets is much less than previously thought and, as the bank liabilities (which are the deposits created during the boom) remain constant, the market discovers the banks are in fact bankrupt, and were not for the desperate action of the lender of last resort bailing out the banks, the whole financial and monetary system would collapse. In any case it is important to understand that the financial and banking crisis IS NOT the cause of the economic recession but one of its most important first symptoms.

Economic recessions begin when the market discovers that many investment projects launched during the boom years are not profitable. And now consumers demand entrepreneurs to liquidate these malinvestments (which now it is discovered were planned to mature in a too distant future considering the true wishes of consumers). The recession means the beginning of the painful readjustment of the productive structure, which consists of withdrawing productive resources from the stages furthest from consumption and transferring back to those closest to it.

Both, the financial crisis and the economic recession are always unavoidable, once a credit

Expansion has developed, because the market sooner or later discovers that investment projects financed by banks during the boom were too ambitious due to a lack of the real saved resources that would be needed to complete them. In other words, bank credit expansion during the boom encourages entrepreneurs to act as if savings had increased when in fact this did not happen. A generalized error of economic calculation has been committed and sooner or later it is discovered and corrected spontaneously by the market. In fact all the austrian theory of economic cycles is a particular case of the theorem of the impossibility of economic calculation under socialism discovered by ludwig von mises, that it is also fully applicable to the current wrongly designed and heavily regulated banking system.

The specific features of the 2008 financial crisis and the current economic recession.

The expansionary cycle which has now come to a close was set in motion when the american economy emerged from its last recession in 2001 and the federal reserve embarked again on a major artificial expansion of credit and investment, an expansion unbacked by a parallel increase in voluntary household saving. Even, during several years, the money supply in the form of banknotes and deposits has grown at an average rate of over ten percent per year (which means that every seven years the total volume of money circulating in the world has doubled). The media of exchange originating from this severe fiduciary inflation have been placed on the market by the banking system as newly-created loans granted at extremely low (and even negative in real terms) interest rates. This fueled a speculative bubble in the shape of a substantial rise in the prices of capital goods, real estate assets, and the securities which represent them and are exchanged on the stock market, where indexes soared.

Curiously enough, like in the "roaring" years prior to the great depression of 1929, the shock of monetary growth has not significantly influenced the unit prices of the subset of consumer goods and services (which are only approximately one third of the total number of goods that are exchanged in the market). The last decade, like the 1920s, has seen a remarkable increase in productivity as a result of the introduction on a massive scale of new technologies and significant entrepreneurial innovations which, were it not for the "money and credit injection," would have given rise to a healthy and sustained reduction in the unit price of the goods and services all citizens consume. Moreover, the full incorporation of the economies of china and india into the globalized market has gradually raised the real productivity of consumer goods and services even further. The absence of a healthy "deflation" in the prices of consumer goods in a stage of such considerable growth in productivity as that of recent years provides the main evidence that the monetary shock has seriously disturbed the whole

economic process. And remember now the "antideflationist hysteria" of those who, even during the years of the bubble, used the slightest symptoms of this healthy deflation, to justify even greater doses of credit expansion.

As we have already seen, artificial credit expansion and the (fiduciary) inflation of media of exchange offer no short cut to stable and sustained economic development, no way of avoiding the necessary sacrifice and discipline behind all high rates of voluntary saving. (in fact, before the crisis and particularly in the united states, voluntary saving not only failed to increase, but even fall to a negative rate during several years.)

The specific triggers of the end of the euphoric monetary "binge" and the beginning of the recessionary "hangover" are many, and they can vary from one cycle to another. In this crisis, the most obvious triggers were first, the rise in the price of commodities and raw materials, particularly oil, second, the subprime mortgage crisis in the united states, and finally, the failure of important banking institutions when it became clear in the market that the value of their debts exceeded that of their assets (mainly mortgage loans erroneously granted).

If we consider the level of past credit expansion and the quality and volume of malinvestment produced by it, very probably in this cycle the economies of the european monetary union are in comparison in a somewhat less poor state (if we do not consider the relatively greater continental european rigidities, particularly in the labor market, which tend to make recessions in europe longer and more painful). The expansionary policy of the european central bank, though not free of grave errors, has been somewhat less irresponsible than that of the federal reserve. Furthermore, fulfillment of the convergence criteria for the monetary union involved at the time a healthy and significant rehabilitation of the chief european economies. Only some countries on the periphery, like ireland and spain, were immersed in considerable credit expansion from the time they initiated their processes of convergence.

The case of spain is paradigmatic. The spanish economy underwent an economic boom which,

In part, was due to real causes (like the liberalizing structural reforms which originated with jose marfa aznar's administration). Nevertheless, the boom was also largely fueled by an artificial expansion of money and credit, which grew at a rate nearly three times the corresponding rates in france and germany.

Spanish economic agents essentially interpreted the decrease in interest rates which resulted

From the convergence process in the easy-money terms traditional in spain: a greater availability of easy money and mass requests for loans from spanish banks (mainly to finance real estate speculation), loans which spanish banks granted by creating the money ex nihilo while european central bankers looked on unperturbed. Once the crisis has hit spain the readjustment has been quick and efficient: in less than a year more than 150,000 companies -mainly related with the building sector- have disappeared, almost five million workers that were employed in the wrong sectors have been dismissed, and nowadays we can conclude that although very weak, the economic body of spain has been already hailed. We will come back later to the economic policy more appropriate for the current circumstances. But before that, let us make some

comments on the influence of the new accounting rules on the current economic and financial crisis.

The negative influence of the new accounting rules.

We must not forget that a central feature of the long past period of artificial expansion was a gradual corruption, on the american continent as well as in europe, of the traditional principles of accounting as practiced globally for centuries.

To be specific, acceptance of the international accounting standards (ias) and their incorporation into law in most countries have meant the abandonment of the traditional principle of prudence and its replacement by the principle of "fair value" in the assessment of the value of balance sheet assets, particularly financial assets.

In fact, during the years of the "speculative bubble," this process was characterized by a feedback loop: rising stock-market values were immediately entered into the books, and then such *accounting entries were sought as justification for further artificial increases in the prices of financial assets listed on the stock market.*

It is easy to realize that the new accounting rules act in a pro-cyclic manner by heightening volatility and erroneously biasing business management: in times of prosperity, they create a false "wealth effect" which prompts people to take disproportionate "risks"; when, from one day to the next, the errors committed come to light, the loss in the value of assets immediately decapitalizes companies, which are obliged to sell assets and attempt to recapitalize at the worst moment, when assets are worth the least and financial markets dry up. Clearly, accounting principles which have proven so disturbing must be abandoned as soon as possible, and the recent accounting reforms recently enacted, must be reversed. This is so not only because these reforms mean a dead end in a period of financial crisis and recession, but especially because it is vital that in periods of prosperity we stick to the principle of prudence in valuation, a principle which has shaped all accounting systems from the time of luca pacioli at the beginning of the fifteenth century to the adoption of the false idol of the international accounting rules.

It must be emphasize that the purpose of accounting is not to reflect supposed "real" values (which in any case are subjective and which are determined and vary daily in the corresponding markets) under the pretext of attaining a (poorly understood) "accounting transparency." instead, the purpose of accounting is to permit the prudent management of each company and to prevent capital consumption, as hayek already established as early as 1934 in his article "the maintenance of capital" (hayek 1934). This requires the application of strict standards of accounting conservatism (based on the prudence principle and the recording of either historical cost or market value, whichever is less), standards which ensure at all times that distributable profits come from a safe surplus which can be distributed without in any way endangering the future viability and capitalization of each company.

Who is responsible for the current situation?

Of course the spontaneous order of the unhampered market is *not* responsible for the current situation. And one of the most typical consequences of every past crisis and of course of this current one, is how many people is blaming the market and firmly believing that the recession is a "market failure" that requires more government intervention. The market is a process that spontaneously reacts in the way we have

seen against the monetary aggression of the bubble years, which consisted of a huge credit expansion that was not only allowed but even orchestrated and directed by *central banks, which are the true responsible institutions for all the economic sufferings of the crisis and recession that is affecting the world*. And paradoxically central banks have been able to present themselves to the general public not only as indignant victims of the lost list of ad hoc escape goats they have been able to put together (stupid private bankers, greedy managers receiving exorbitant bonuses, etc.), but also as the only institutions that bailing out the banking system in the last resort have avoided a much more deep tragedy.

Anyhow, it is crystal clear that the world monetary and banking system is chronically

Suffering from a wrong institutional design at least from peel's bank act of 1844. That there is not a free market in the monetary and banking system but just the opposite: private money has been nationalized, legal tender rules introduced, a huge mess of administrative regulations enacted, interest rate manipulated and most importantly, everything is directed by a central organ of monetary planning: the central bank.

In other words, real socialism, represented by state money, central banks and financial administrative regulations, is still in force in the monetary and credit sectors of the so called free market economies.

As a result of this fact we experience regularly in the area of money and credit all the negative consequences established by the theorem of the impossibility of socialism discovered by those distinguished members of the austrian school of economics: ludwig von mises and friedrich hayek.

Specifically, the central planners of state money are unable to know, to follow and to control the changes in both the demand and supply of money. Furthermore, as we have seen the whole financial system is based on the legal privilege given by the state to private bankers to act with a fractional reserve ratio in relation with the demand deposits they receive from their clients. As a result of this privilege, private bankers are not true financial intermediaries, but are mainly creators of deposits materializing in credit expansions that inevitably end in crisis and recession.

The most rigorous economic analysis and the coolest, most balanced interpretation of past and recent economic and financial events lead inexorably to the conclusion that central banks (which, again, are true financial central-planning agencies) cannot possibly succeed in finding the most convenient monetary policy at every moment. This is exactly the kind of problem that became evident in the case of the failed attempts to plan the former soviet economy from above.

To put it another way, the theorem of the economic impossibility of socialism, which the austrian economists ludwig von mises and friedrich a. Hayek discovered, is fully applicable to central banks in general, and to the federal reserve and (at one time) alan greenspan and (currently) ben bernanke in particular. According to this theorem, it is impossible to organize any area of the economy and specially the financial sector, based on coercive commands issued by a planning agency, since such a body can never obtain the information it needs to infuse its commands with a coordinating nature. This is precisely what i analyze in chapter 3 of my book on *socialism, economic calculation*

and *entrepreneurship* which has just been published by Edward Elgar in association with the Institute of Economic Affairs (Huerta de Soto, 2010b).

Indeed, nothing is more dangerous than to indulge in the "fatal conceit" - to use Hayek's useful expression (Hayek, 1990) - of believing oneself omniscient or at least wise and powerful enough to be able to keep the most suitable monetary policy fine tuned at all times. Hence, rather than soften the most violent ups and downs of the economic cycle, the Federal Reserve and, to a lesser extent, the European Central Bank, have been their main architects and the culprits in their worsening.

Therefore, the dilemma facing Ben Bernanke and his Federal Reserve Board, as well as the

Other central banks (beginning with the European Central Bank), is not at all comfortable. For years they have shirked their monetary responsibility, and now they find themselves in a blind alley. They can either allow the recessionary process to follow its path, and with it the healthy and painful readjustment, or they can escape forward toward a "renewed inflationist" cure. With the latter, the chances of even more severe recession (even inflationary recession) in the not-too-distant future increase dramatically. (This was precisely the error committed following the stock market crash of 1987, an error which led to the inflation at the end of the 1980s and concluded with the sharp recession of 1990-1992.)

Furthermore, the reintroduction of the artificially cheap-credit policy at this stage could only hinder the necessary liquidation of unprofitable investments and company reconversion. It could even wind up prolonging the recession indefinitely, as occurred in the Japanese economy, which, after all possible interventions have been tried, has ceased to respond to any stimulus involving either monetarist credit expansions or Keynesian methods.

It is in this context of "financial schizophrenia" that we must interpret the "shots in the dark" fired in the last two years by the monetary authorities (who have two totally contradictory responsibilities: both to control inflation and to inject all the liquidity necessary into the financial system to prevent its collapse). Thus, one day the Fed rescues Bear Stearns, AIG, Fannie Mae, Freddie Mac or Citigroup, and other day it allows Lehman Brothers to fail, under the amply justified pretext of "teaching a lesson" and refusing to fuel moral hazard. Finally, in light of the way events were unfolding, the US and European governments launched multi-billion-dollar plans to purchase illiquid (or better worthless) assets from the banking system, or to monetize the public debt, or even to buy banks shares, nationalizing totally or partially the private banking system. And considering all what we have seen, which are now the possible future scenarios?

Possible future scenarios and the most appropriate economic policy.

Theoretically, under the wrongly designed current financial system, once the crisis has hit

We can think of four possible scenarios:

The first scenario is the catastrophic one in which the whole banking system based on

Fractional reserve collapses. This scenario seems to have been avoided by central banks which, acting as lenders of last resort, are bailing out private banks whenever it is necessary.

The second scenario is just the opposite of the first one but equally tragic: it consist of an "inflationist cure" so intense, that a new bubble is created. This escape forward would only temporarily postpone the solution of the problems at the cost of making them far more serious later (this is precisely what happened in the crisis of 2001).

The third scenario is what i have called the "japanization" of the economy: it happens when the reintroduction of the cheap-credit policy together with all conceivable government interventions entirely block the spontaneous market process of liquidation of unprofitable investments and company reconversion. As a result, the recession prolongs indefinitely and the economy does not recover and ceases to respond to any stimulus involving monetarist credit expansions or keynesian methods.

The fourth and final scenario is currently the most probable one: it happens when the spontaneous order of the market, against all the odds and despite all government interventions, finally sooner or later is able to complete the microeconomic readjustment of the whole economy, and the necessary reallocation of labor and the other factors of production toward profitable lines based on sustainable new investment projects.

In any case, after a financial crisis and an economic recession have hit it is necessary to avoid any additional credit expansion (apart from the minimum monetary injection strictly necessary to avoid the collapse of the whole fractional reserve banking). And the most appropriate policy would be to liberalize the economy at all levels (especially in the labor market) to permit the rapid reallocation of productive factors (particularly labor) to profitable sectors. Likewise, it is essential to reduce public spending and taxes, in order to increase the available income of heavily-indebted economic agents who need to repay their loans as soon as possible. Economic agents in general and companies in particular can only rehabilitate their finances by cutting costs (especially labor costs) and paying off loans. Essential to this aim are a very flexible labor market and a much more austere public sector. These measures are fundamental if the market is to reveal as quickly as possible the real value of the investment goods produced in error and thus lay the foundation for a healthy, sustainable economic recovery.

However, once the economy recovers (and in a sense the recovery begins with the crisis and the recession themselves which mark the discovery by the market of the errors committed and the beginning of the necessary microeconomic readjustment), i am afraid that, as has happened in the past again and again, and no matter how careful are central banks in the future (can we expect they have learned the lesson? For how long they will keep their memories of what happened?), nor how many new regulations are enacted (as in the past all of them and specially basel h and m attacking only the symptoms but not the true causes), i am afraid that sooner or later new cycles of credit expansion, artificial economic boom, financial crisis and economic recession will inevitably continue affecting us until the world financial and banking systems are entirely redesigned according to the general principles of private property law that are the essential foundation of the capitalist system and that require a 100 per cent reserve for any demand deposit contract.

Conclusion

I begun this lecture with peel's bank act, and i will finish also with it. On june 13 and 24, 1844 robert peel pointed out in the house of commons that in each one of the previous monetary crises "there was an increase in the issues of country bank paper" and that "currency without a basis (...) Only creates fictitious value, and when the bubble burst spreads ruin over the country and deranges all commercial transactions".

Today, 166 years later, we are still suffering from the problems that were already correctly

Diagnosed by robert peel. And in order to solve them and finally reach the only truly free and stable financial and monetary system that is compatible with a free market economy in this 21st century, it will be necessary to take the following three steps:

First, to develop and complete ti-ie basic concept of peel's bank act extending also the prescription of 100 per cent reserve requirement to demand deposits and equivalents. Hayek says that this radical solution would prevent all future crises (hayek 1984, 29) as no credit expansions would be possible without a prior increase in real genuine saving, making investments sustainable and fully matched with prior voluntary savings. And i would add to hayek the most important fact that 100 per cent banking is the only one compatible with the general principles of the law of property rights that are indispensable for the capitalism system to work: there is no reason to treat deposits of money differently from any other deposit of a fungible good, such as wheat or oil in which nobody doubts the need to keep the 100 per cent reserve requirement.

In relation with this first step of the proposed reform it is most encouraging to see how two tory mp's, douglas carswell and steve baker, were able to introduce in the british parliament on september the 15th and under the 10 minute rule tfie first reading of a bill to reform the banking system extending the prescriptions of peel's bank act to demand deposits. This "customer choice disclosure and protection bill" will be discussed in its second reading, three weeks from now, on november the 19th, and has two goals: first to fully and effectively defend citizens right of ownership over money they have deposited in checking accounts at banks; and second, to once and for all put an end to the recurrent cycles of artificial boom, financial crisis and economic recession. Of course that this first draft of the bill still needs to be completed with some important details, for instance the time period (let us say a month) under which all deposits should be considered demand deposits for storage and not for investment, or that any contract that guarantees full availability of its nominal value at any moment should be considered at all effects as a demand deposit for storage. But the mere discussion of these matters at the british parliament and by tfie public at large is already of a huge importance. In any case it is exciting that a handful of mp's have taken this step against the tangle of vested interests related with the current privileged fractional reserve banking system. If they are successful in their fight against what we could call the current "financial slavery" that affects the world they will go down in history like william wilberforce -with the abolition of the slave trade- and other outstanding british figures to which the whole world owes so much.

Second, if we want to culminate ti-ie fall of ti-ie berlin wall and get rid ti-ie real socialism that

Still remains in the monetary and credit sector, a priority would be the elimination of central banks, which would be unnecessary as lenders of last resort if the preceding 100 per cent reserve reform is introduced, and harmful if they insist on continuing to act as financial central- planning agencies.

And *third*, who will issue the monetary base? Maurice allais, the french nobel prize winner who passed away two weeks ago, proposed that a public agency prints the public paper money at a rate of increase of 2 per cent per year. I personally do not trust in this solution as any situation of emergency of the state budget would be used, as in the past, as a pretext to issue additional doses of fiduciary media. For this reason, and this is probably my most polemic proposal, to put an end to any future manipulation of our money by the authorities, what is required is the full privatization of the current, monopolistic, and fiduciary state-issued paper base money, and its replacement with a classic pure gold standard.

There is an old spanish saying: "a grandes males, grandes remedios". In english, "great

Problems do require radical solutions". And although, of course any step toward these three measures would significantly improve our current economic system, it must be understood that the reforms proposed and taken by governments up to now (including basel e and m) are only nervously attacking the symptoms but not the real roots of the problem, and precisely for that reason they will again miserably fail in the future.

Meanwhile, it is encouraging to see how a growing number of scholars and private

Institutions are studying again not only the radical reforms required by a truly honest private money, but also very interesting proposals for a suitable transition to a new banking system, like the one i develop in chapter 9 of my book on *money, bank credit&nd economic cycles*. By the way, in this chapter i also explain a most interesting byproduct of the proposed reform and that consist of the possibility of paying back, without any cost nor inflationary effects, most of the existing public debt which in the current circumstances is a very worrying and increasing heavy burden in most countries.

Briefly outlined, what i propose and the cobden centre has developed with more detail for the

Specific case of the united kingdom, is to print the paper bank notes necessary to consolidate the volume of demand deposits that the public decides to keep in the banks. In any case, printing this new money would not be inflationary as it would be handed to banks and kept entirely sterilized, so to speak, as 100 per cent asset collateral of bank liabilities in the form of demand deposits. In this way, the basket of bank assets (loans, investments, etc.) That are currently backing the demand deposits would be "freed", and what i propose is to include these "freed" assets in mutual funds swapping their units at their market value by the outstanding treasury bonds. In any case, an important warning must be given: naturally, and must never tire of repeating it, the solution proposed is only valid in the context of an irrevocable decision to reestablish a free-banking system subject to a 100 percent reserve requirement on demand deposits. However, and no matter how important this possibility is considered under the current circumstances, we must not forget it is only a byproduct (of "secondary" importance) comparing with the major reform of the banking system we have explained.

And now i finish, should in this 21st century a new robert peel would be able to push successfully all these proposed reforms, he would render an invaluable service to the rest of the world.

All these considerations are crucially important in light of the critical state of the international financial system. Nevertheless, while it is tragic that we have arrived at the current situation, it is even more tragic, if possible, the widespread lack of understanding regarding the causes of the phenomena that plague us, and especially the atmosphere of confusion and uncertainty prevalent among experts, analysts, and most economic theorists. In this area at least, i can hope the different editions of my book on "money, bank credit and economic cycles" may contribute to the theoretical training of readers, to the intellectual rearmament of new generations, and eventually, to the so much needed institutional redesign of the entire monetary AND FINANCIAL SYSTEM OF CURRENT MARKET ECONOMIES. IF THIS HOPE IS FULFILLED, I WILL NOT ONLY VIEW THE EFFORT MADE AS WORTHWHILE, BUT WILL ALSO DEEM IT A GREAT HONOR TO HAVE CONTRIBUTED, EVEN IN A VERY SMALL WAY, TO MOVE IN THE RIGHT DIRECTION.

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